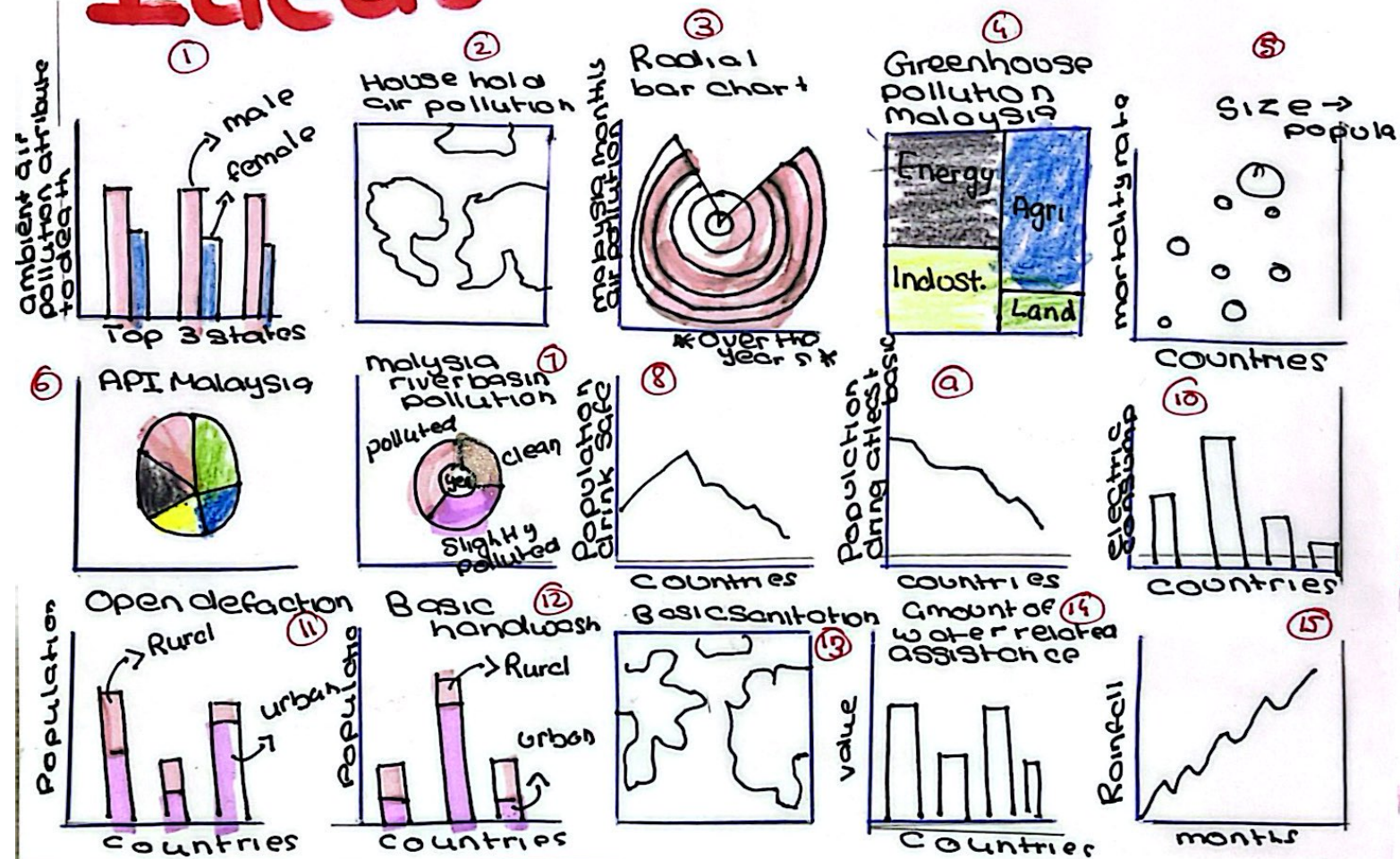


# Ideas



## FILTER

- ⑥ → There are too many places. This might cause visual to be crowded. Values don't form a whole.
- ⑦ → Doesn't form a whole
- ⑤ → If there are too many countries smaller ones may overlap with larger bubble. Better limit to top 10.

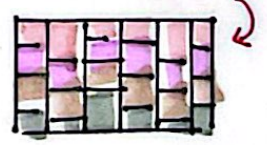
## Categories

Air pollution  
↳ Health (12, 5)  
Malaysia air pollution  
emission (3, 4, 6)  
Water access and sanitation (8, 4, 11, 13)  
Energy & environmental (10, 7, 15)

## Combine & Refine

⑧ ⑨ → Can be combined to form a marimekko chart. Each bar would show safe water access and basic sanitation on top of each other with urban and rural within each section.

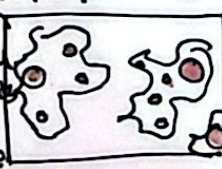
Can be combined to show dual axis line chart



⑪ ⑫ These two can be combined to form a line chart. To show the trend between open defecation and hand washing.



② ⑤ Combine these into layered map. Show air pollution as chloropleth and mortality as size of bubble.



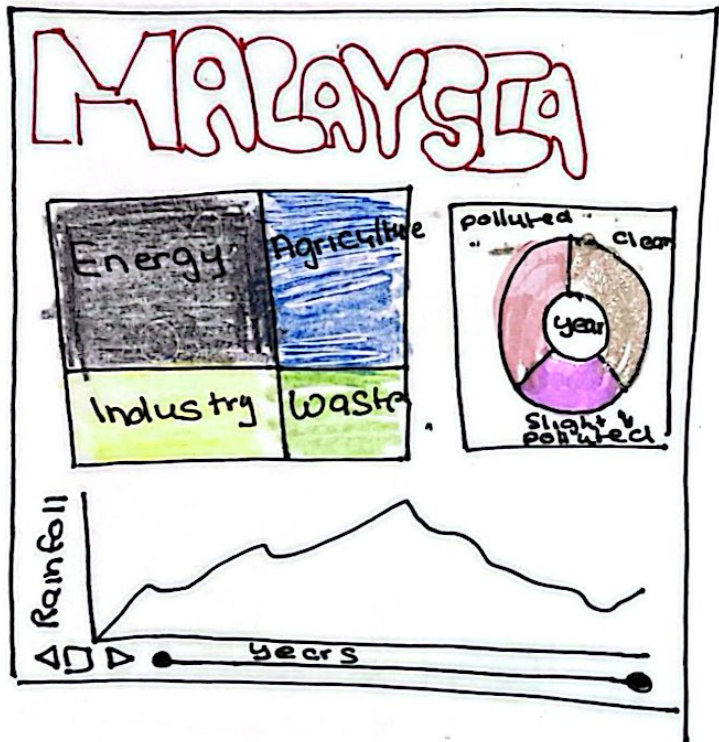
## QUESTIONS

1. Does this discuss Malaysia enough?
2. Does this portray a story?

Author: Shrinishi Venkates  
Date: 03/10/2024  
Sheet: 01  
Task: Planning



# Layout



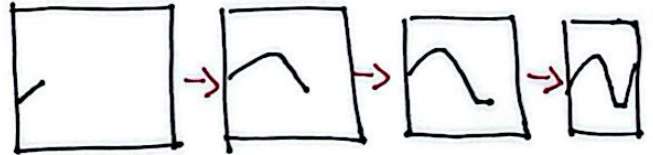
# Focus



Use these buttons to play or pause the animation



Choose the slider to manually select a year



# Discussion

## advantage:

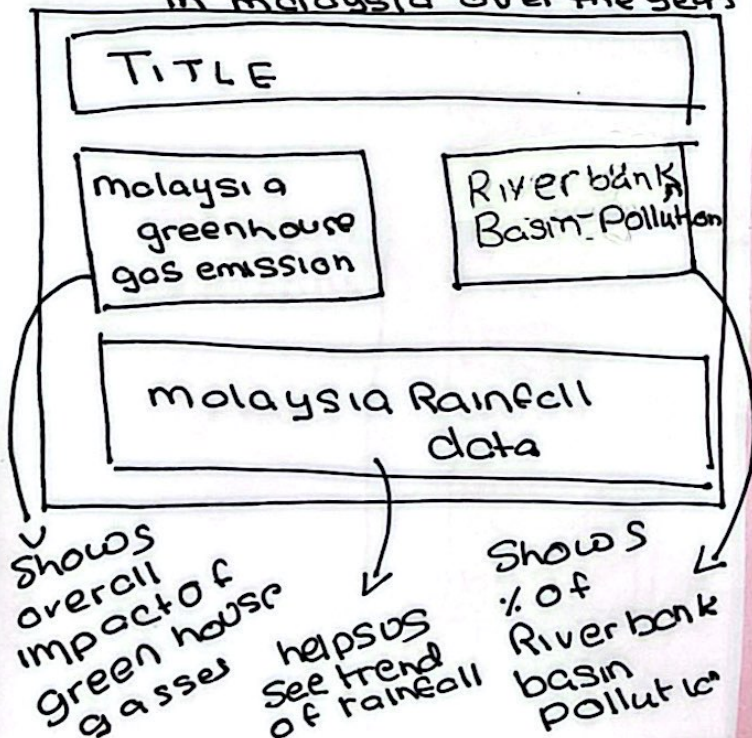
- \* well segmented into distinct sections
- \* easy for viewer to interact with.
- \* enjoyable animation
- \* can check chart with no hassle

## disadvantage

- \* Space is wasted
- \* Title is not enough/good
- \* there is a break in years might be hard to show visualisation

# Operations

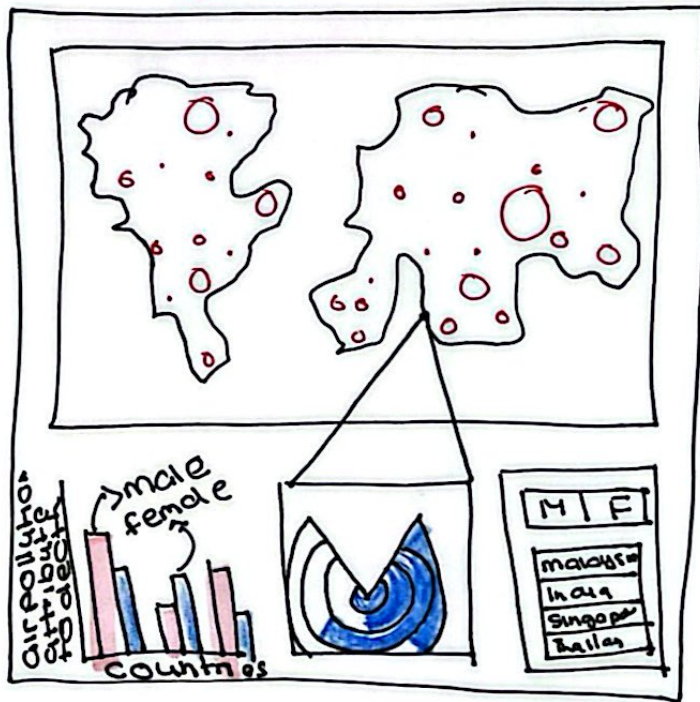
The main focus is to see trends of the overall environmental impact in Malaysia over the years



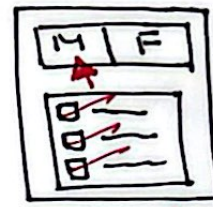
Author: Shrinithi Venkatesh  
Sheet: 02  
Date: 03/10/2024  
Task: Initial design



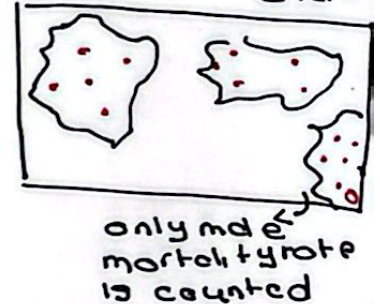
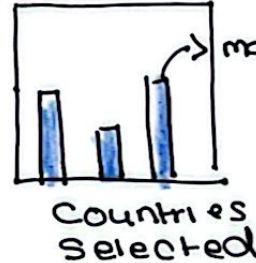
# Layout



## Operations



This filter allows user to pick either male or female details to show in the map and chart or select countries to show in bar chart



hovering over an element provides details regarding the element

## Discussions

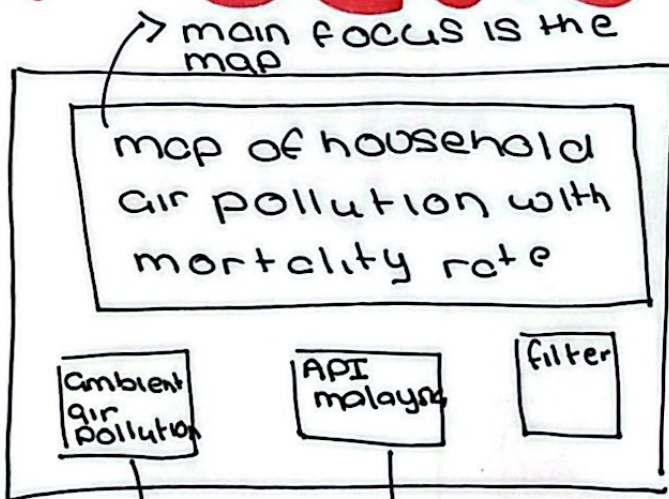
### Advantages:

- \* easy to use
- \* easy to understand
- \* easy to use interaction

### disadvantage

- \* Some countries in the map might not be in the bar chart due to different data set
- \* no change happens to Radar chart
- \* Too simple
- \* No heading / title

## Focus



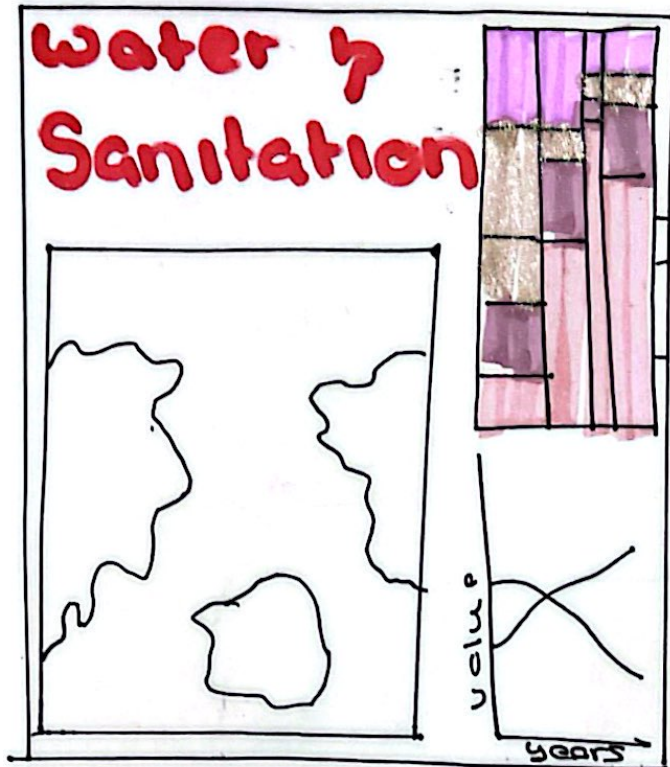
To compare men and women deaths due to household air pollution

This zooms into the map to show user Air Pollution Index in Malaysia

Author: Shrinithi Venkate  
Date: 03/10/24  
Sheet: 03  
Task: Initial Visualisation



# Layout



# Operation

Hovering over a country or element provides in detail explanation about it

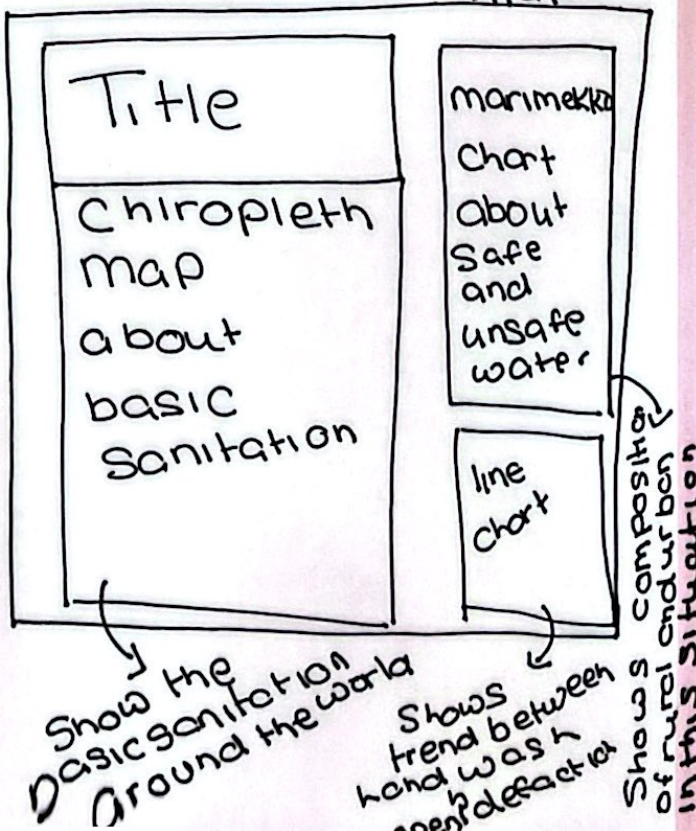


Clicking on a country in the map will highlight it other charts



# Focus

main focus is the Chiropleth map



# Discussion

## advantages

- \* Simple
- \* easy to understand
- \* can understand at a glance
- \* we can change graph for better understanding with no issue

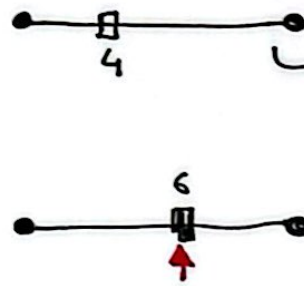
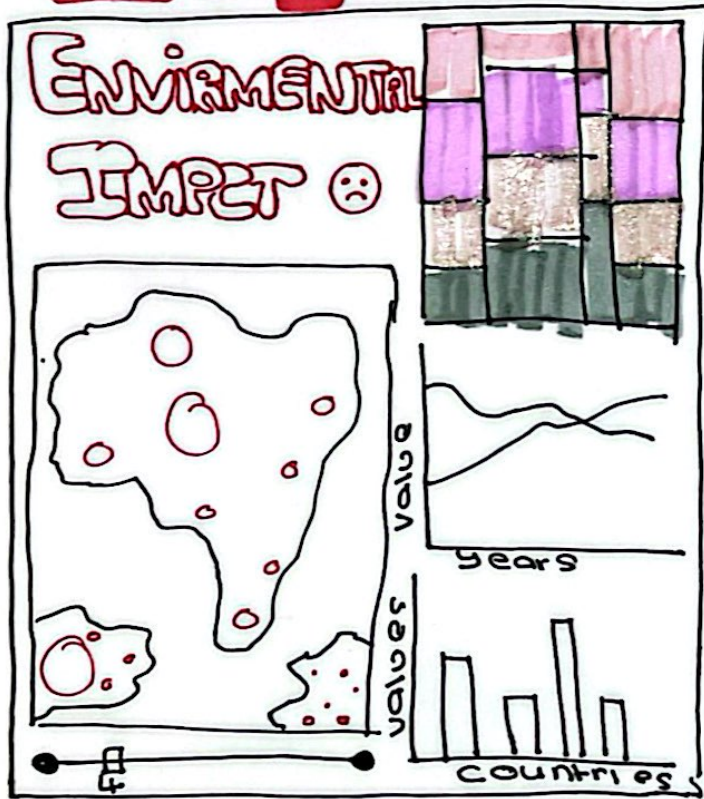
## disadvantages

- \* users might not know to click on map to highlight
- \* not all countries in map will be in other charts
- \* charts might be blunt

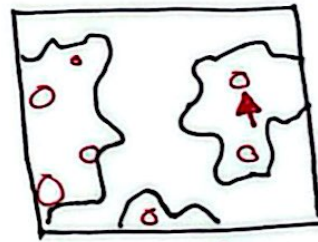
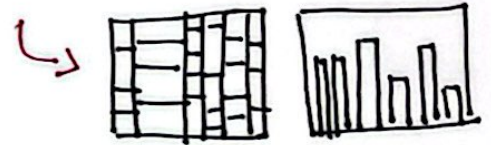
Author: Shruthi Venkata  
Date: 03/10/2024  
Sheet: 04  
Task: Initial design



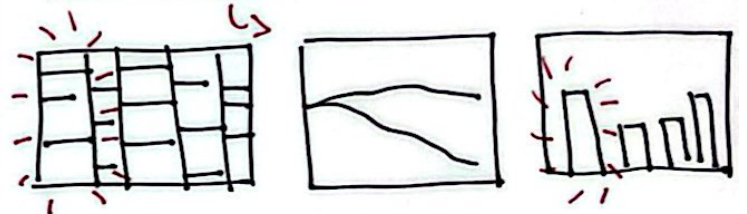
# Layout



Topic number of countries to be shown in map, heatmap and bar chart

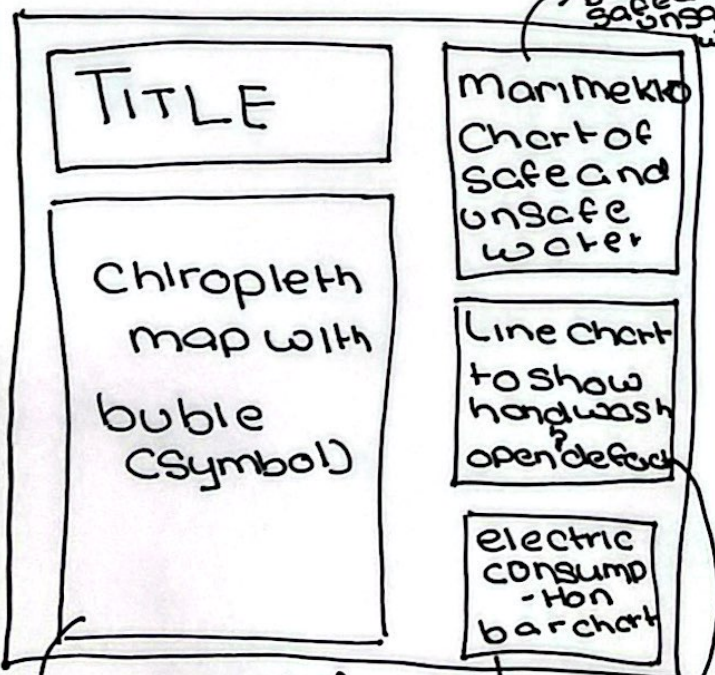


Click on a country for it to be highlighted across the dashboard



# Focus

main focus is the map  
see distri  
button of  
safe and  
unsafe water



see impact of air pollution with Td  
distribution  
See trend between hand wash

# Operation

## Details

- \* estimated time is 2 weeks
- \* very minimal data cleaning
- \* Python to group and join data
- \* Using only Vega lite, Javascript, and html for creating visualisation, animation and executing dashboard

Author: Shruthi Venkates  
Date: 03/10/24  
Sheet: 5  
Task: Realisation